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[54] **ORGANIC ELECTROLUMINESCENT ELEMENTS**

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[52] **U.S. Cl.** **428/212**; 428/690; 428/917; 428/457; 313/504; 313/506

[58] **Field of Search** 428/457, 689, 428/690, 704, 917, 212; 313/502, 504, 506

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[57] **ABSTRACT**

An organic EL element that exhibits excellent durability by reducing the amount of accumulated carriers and curbing degradation by heat generated while the organic EL element is driven. The organic EL element comprises a pair of a hole injecting electrode and an electron injecting electrode sandwiching an organic luminous layer and an organic carrier transport layer placed one on top of the other to have a boundary therebetween, characterized in that either the organic luminous layer or the organic carrier transport layer, whichever is placed closer to the hole injecting electrode, is doped with a first organic material, the first organic material being made of at least one substance, a minimum level of a conducting band of the first organic material being lower than a minimum level of a conducting band of a material forming the layer to be doped with the first organic material, and the other layer which is placed closer to the electron injecting electrode is doped with a second organic material, the second organic material being made of at least one substance, a maximum level of a valence band of the second organic material being higher than a maximum level of a valence band of the other layer to be doped with the second organic material.

14 Claims, 3 Drawing Sheets